

# Increase your profits

## Shelterbelt designs

A well-considered property plan ensures objectives including landscape integrity, biodiversity, and agriculture are considered. Many cost-effective digital mapping programs can be downloaded from the internet and used with appropriate data to complete a farm map as the basis for development of whole farm plan.

The location of a shelterbelt is influenced by considering all site features such as: property infrastructure, prevailing seasonal winds, soil type, problem areas of erosion and salinity, remnant vegetation, use of nonarable areas and other on-site specific features. It is therefore important to specifically design the shelterbelt to suit the required purposes / benefits.

**Below:** Grassed shelter



**Below:** Permeable shelterbelts of trees and shrubs



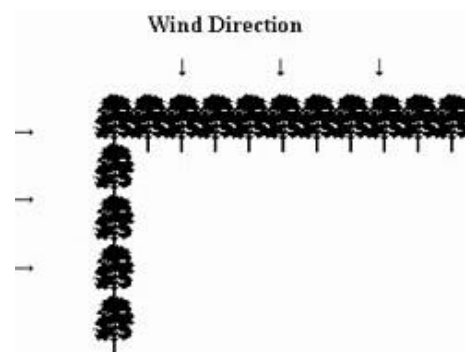
In the Goulburn Broken catchment, plant shelterbelts and windbreaks running north-south.

Right angled windbreaks provide protection from a range of wind directions.

During summer, shelterbelts protect crops and pastures from severe evapotranspiration, wind, and soil erosion; such situations benefit from a grid of shelterbelts using north-south and east-west orientations.

An “L” shaped permeable shelter belt with trees and shrubs provides shade for stock at various times of day and protection from winds from all directions and prevents permanent shading of pasture, exposing all areas to sun at different times of the day.

Generally, the protected area equals the length of the belt x height of shelterbelt x 10. Minimum length should be ten times the height (tallest tree). Therefore, a 25m high tree should create a shelterbelt 250m long.



Effective locations are high in the landscape (ridgeline) producing the greatest area of protection.

Planting on contour lines should be avoided as localised frosts can result.

#### References:

*Linden (2015) Profitable biodiversity assets – making \$ from the shade and shelter on your property.*

Whole Farm Planning courses are available on request from DEDJTR Benalla offices.

EverGraze Shelter Investment Tool [www.evergraze.com.au/library-content/shelter-investment-tool/](http://www.evergraze.com.au/library-content/shelter-investment-tool/)

*The Economic benefits of native shelter belts* report by Basalt to Bay Network issue 3/2015

Economic Development, Jobs, Transport and Resources

website <http://agriculture.vic.gov.au/agriculture/farm-management/soil-and-water/erosion/shelterbeltsfor-control-of-wind-erosion>



For information about potential incentives to plant trees and shrubs for shelterbelts contact the Goulburn Broken CMA on 5822 7700 or via our website on [www.gbcma.vic.gov.au](http://www.gbcma.vic.gov.au)

